



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/963,618	09/26/2001	Ali Emam Bakhsh	TRW(AP)5810	9744
26294	7590	02/04/2004	EXAMINER	
TAROLLI, SUNDHEIM, COVELL & TUMMINO L.L.P. 526 SUPERIOR AVENUE, SUITE 1111 CLEVEVLAND, OH 44114			DUNN, DAVID R	
			ART UNIT	PAPER NUMBER
			3616	

DATE MAILED: 02/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/963,618

Applicant(s)

BAKSH ET AL

Examiner

David Dunn

Art Unit

3616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-7, 9-11 and 13-32 is/are rejected.
- 7) ☒ Claim(s) 8 and 12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

This Office Action is responsive to the amendment filed 11/18/03.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claim 30 is rejected under 35 U.S.C. 102(e) as being anticipated by Nakajima et al. (6,334,626).

Nakajima et al. discloses an inflatable vehicle occupant protection device (16; see Figure 4) inflatable away from the vehicle roof (see Figure 5) into a position between the side structure (39) and a vehicle occupant, said inflatable vehicle occupant protection device being constructed and arranged to during inflation engage an occupant's head positioned against the side structure of the vehicle and move the occupant's head laterally in the vehicle and away from the vehicle side structure, said inflatable vehicle occupant protection device inflating between the side structure of the vehicle and the occupant's head (the airbag would inherently be able to inflate as such; note angle of deployment in Figure 5).

3. Claim 30 is rejected under 35 U.S.C. 102(e) as being anticipated by White et al. (6,179,324).

White et al. discloses an inflatable vehicle occupant protection device (80; see Figure 4) inflatable away from the vehicle roof (40) into a position between the side structure and a vehicle occupant, said inflatable vehicle occupant protection device being constructed and arranged to during inflation engage an occupant's head positioned against the side structure of the vehicle and move the occupant's head laterally in the vehicle and away from the vehicle side structure, said inflatable vehicle occupant protection device inflating between the side structure of the vehicle and the occupant's head (the airbag would inherently be able to inflate as such; note angle of deployment toward the side structure; see Figures 4-5).

White et al. shows housing (130, etc) for storing the airbag. With respect to claim 31, as seen in Figure 4, the angle is about 30 degrees relative to a vertical axis. With respect to claim 32, the airbag is adapted to engage the occupant's head proximate a location where the occupant's head engages the vehicle side structure (dependent upon the size and posture of the occupant).

4. Claim 30 is rejected under 35 U.S.C. 102(e) as being anticipated by Kato et al. (6,082,761).

Kato et al. discloses an inflatable vehicle occupant protection device (12; see Figure 5) inflatable away from the vehicle roof into a position between the side structure and a vehicle occupant, said inflatable vehicle occupant protection device being constructed and arranged to during inflation engage an occupant's head positioned against the side structure of the vehicle and move the occupant's head laterally in the vehicle and away from the vehicle side structure, said inflatable vehicle occupant protection device inflating between the side structure of the

Art Unit: 3616

vehicle and the occupant's head (the airbag would inherently be able to inflate as such; note angle of deployment toward the side structure; see Figures 3-4).

Kato also shows the air bag including an interconnection (see 16, 10; Figure 6) between two overlying panels (column 5, lines 12-21) which forms a forwardmost, rearwardmost, and a middle chamber.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 5, 6, 15-18, 20-27, 31, and 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over White, Jr. et al. (6,179,324) in view of Hoeft et al. (2002/0158450).

White, Jr. et al. is discussed above and fails the airbag rolled up in an outboard direction.

Hoeft et al. shows a side airbag rolled up in an outboard direction (see Figure 4a) about an axis extending generally parallel to the length of the airbag. Hoeft et al. also shows a fill tube (28) for directing inflation fluid into the airbag. Hoeft et al. shows a stored gas inflator (see paragraph 0027). With respect to claim 23, Hoeft et al. shows a fold-out portion rearward (see Figure 2, last portion 65) of the rearwardmost portion.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify White, Jr. et al. with the teachings of Hoeft et al. in order to provide an improved storage of the airbag and a more controlled inflation.

With respect to claims 20-22 and 24-27, Hoeft et al. shows an inflatable first portion (i.e., a front or rear portion 65; see Figure 2) and a second portion (a portion adjacent the occupant's head, portion 65 next to the front or rear portion 65); the airbag of White, Jr. et al. with portions as shown by Hoeft et al. would deploy with the first portion is deployed adjacent the forward (or rearward) end of the vehicle and below the occupant's head, and the second portion engages the occupant's head and continues unrolling between the head and the side of the vehicle (inherently, the airbag could unfold as such).

7. Claims 2, 3, 7, 9-14 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over White, Jr. et al. in view of Hoeft et al. as applied above, and further in view of Webber et al. (6,168,191).

The combination of White, Jr. et al. and Hoeft et al. is discussed above and fails to show the connection interconnecting overlying panels.

Webber teaches a side air bag including an interconnection (see, for example, Figure 5A) between two overlying panels (column 3, lines 1-2) which forms a forwardmost, rearwardmost, and a middle chamber. With respect to claim 3, the front connection 340 helps direct inflation fluid into the forwardmost chamber to initially deploy the forwardmost chamber. The second portion is inflated at least partially by inflation fluid directed forward from the rearwardmost chamber into the first portion (see Figure 5A).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of White, Jr. et al. and Hoeft et al. with the teachings of Webber et al. in order to provide interconnection between to panels such that the bag is easier to produce and chambers to improve the inflation and stiffness of the airbag.

Art Unit: 3616

8. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over White, Jr. et al. in view of Hoeft et al. as applied above, and further in view of Yamaji et al. (6,056,316).

The combination of White, Jr. et al. and Hoeft et al. is discussed above and fails to disclose the airbag remaining inflated for at least five seconds.

Yamaji et al. teaches a side air bag with an inflator such that the airbag can remain inflated for about 5 seconds (see column 4, lines 59-65).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of White, Jr. et al. and Hoeft et al. with the teachings of Yamaji et al. in order to better protect the occupants in case of a vehicle rollover.

9. Claims 1-3, 5-7, 9-11, 13-18, 20-28, 31, and 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kato et al. in view of Hoeft et al. (2002/0158450).

White, Jr. et al. is discussed above and fails the airbag rolled up in an outboard direction.

Hoeft et al. shows a side airbag rolled up in an outboard direction (see Figure 4a) about an axis extending generally parallel to the length of the airbag. Hoeft et al. also shows a fill tube (28) for directing inflation fluid into the airbag. Hoeft et al. shows a stored gas inflator (see paragraph 0027). With respect to claim 23, Hoeft et al. shows a fold-out portion rearward (see Figure 2, last portion 65) of the rearwardmost portion. The connections (63) help inflation fluid direct to the forwardmost chamber (see Figure 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kato et al. with the teachings of Hoeft et al. in order to provide an improved storage of the airbag and a more controlled inflation.

Art Unit: 3616

With respect to claims 20-22 and 24-27, Hoeft et al. shows an inflatable first portion (i.e., a front or rear portion 65; see Figure 2) and a second portion (a portion adjacent the occupant's head, portion 65 next to the front or rear portion 65); the airbag of Kato et al. with portions as shown by Hoeft et al. would deploy with the first portion is deployed adjacent the forward (or rearward) end of the vehicle and below the occupant's head, and the second portion engages the occupant's head and continues unrolling between the head and the side of the vehicle (inherently, the airbag could unfold as such). With respect to claim 31, while Kato shows the airbag at different angles at various positions (see Figures 3&4), it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the angle of deployment at 30 degrees in order to better direct the airbag toward the window dependent upon the style and size of vehicle.

10. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kato et al. in view of Hoeft et al. as applied above, and further in view of Webber et al.

The combination of Kato et al. and Hoeft et al. is discussed above and fails to show the inflation fluid being directed from the rearwardmost chamber to the first chamber.

Webber et al. is discussed above.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Kato et al. and Hoeft et al. with the teachings of Webber et al. in order to provide an improved inflation of the airbag.

11. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kato et al. in view of Hoeft et al. as applied above, and further in view of Yamaji et al. (6,056,316).

The combination of Kato et al. and Hoeft et al. is discussed above and fails to disclose the airbag remaining inflated for at least five seconds.

Yamaji et al. teaches a side air bag with an inflator such that the airbag can remain inflated for about 5 seconds (see column 4, lines 59-65).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Kato et al. and Hoeft et al. with the teachings of Yamaji et al. in order to better protect the occupants in case of a vehicle rollover.

Allowable Subject Matter

12. Claims 8 and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

13. Applicant's arguments filed 11/18/03 have been fully considered but they are not persuasive.

It is noted that the prior 101 rejection has been withdrawn based on applicant's amendments.

On page 21, regarding the rejections of claim 30, Applicant argues that the cited references do not provide any teaching of how the devices would perform in the situation where the occupant's head is against the vehicle side structure. In response to this argument, a recitation of the intended use of the claimed invention must result in a structural difference

Art Unit: 3616

between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

Applicant's claimed language in question includes the language "being adapted to engage an occupant's head...moving the occupant's head laterally..." This claim language is merely functional language and it appears that the references cited in the rejections above (Nakajima, White, and Kato) are capable of performing as such. When interpreting functional language, if the prior art is capable of performing the claimed function—even if not directly disclosed—it anticipates. *In re Schreiber*, 128 F.3d 1473, 1478, 44 USPQ2d 1429, 1432 (Fed. Cir. 1997).

Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function. See *In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959).

"[A]pparatus claims cover what a device is, not what a device does." *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990).

On pages 22-23, Applicant argues the 103 rejections, specifically regarding Hoeft. Applicant states that in Hoeft, "the roll direction doesn't matter." In response, it is submitted that it does not matter if Hoeft gives priority to a particular roll or not, Hoeft still shows the teaching of the airbag being rolled in an outboard direction. Applicant also argues that in Hoeft, "the protection device initially inflates away from the roof rail and trim components." In response, it is submitted that the key word here is "initially." Hoeft shows the outboard roll occurring after an initial fold (96); this initial fold influences the initial unfolding. However,

Art Unit: 3616

after this initial unfold, it appears that the airbag would continue its unfolding in a direction towards the window or side structure as it inflates and unfolds the main outboard roll portion. Additionally, in combination with the main references (White, Jr. et al. and Kato et al.), the airbag would unfold towards the side structure.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Terbu et al. shows a airbag curtain rolled up in an outboard direction.

15. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

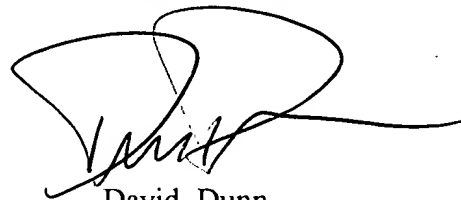
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Dunn whose telephone number is 703-305-0049. The examiner can normally be reached on Mon-Thur, alt. Fridays, 9:00-5:30.

Art Unit: 3616

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 703-308-2089. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'David Dunn', with a large, sweeping flourish extending to the right.

David Dunn
Primary Examiner
Art Unit 3616